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*TM*

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/074,093 03/07/98 SHAW

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PERMAN AND GREEN  
425 POST ROAD  
FAIRFIELD CT 06430-6232

LMC2/1126

EXAMINER

GANTILIA

ART UNIT

PAPER NUMBER

2749  
DATE MAILED:

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11/26/99

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/074,093

Applicant(s)

Conway Robert Shaw

Examiner

Alan Gantt

Group Art Unit

2749



☒ Responsive to communication(s) filed on May 7, 1998

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-17 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-17 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 4, 6

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rydbeck, in view of Nagai.

Regarding claims 1, 2, 4, 5, 7-12, and 17, Rydbeck discloses a canted antenna for a cellular radiotelephone that is movable between a first position and a second position. In the first position, the antenna is substantially parallel to the face of the radiotelephone. In the second position, the antenna is canted away from the face of the radiotelephone thus increasing the distance from the user's head and the antenna during use (col. 1, lines 56-67). The angular orientation caused by the second position defines an arrangement of the antenna and the radiotelephone such that the axis and the imaginary plane defined by the extended front face of the radiotelephone form an acute angle. Thus, the antenna moves through this acute angle from the first position to the second position when observed along the plane joining the first and second position (col. 2, lines 10-27). The first position is also thought of as a storage position and reduces the profile of the radiotelephone (col. 3, lines 4-10). Rydbeck makes use of a boss having

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an angled surface connecting one end of the antenna to permit the movement from the first position to the second position. Rydbeck does not utilize a pivot to permit single plane movement between the two positions.

Nagai teaches the use of a hinge to provide pivotable movement about a hinge for its rotating antenna type portable radiotelephone apparatus. The antenna moves through a single plane with the purpose of reducing the adverse affects of interference from the human body. The antenna may be rotatably positioned on one end of the hinge section or both ends of the hinged section (col. 1, lines 48-61). There are abuts and groove fittings involved with the hinge section that permit the antenna to be secured at both ends of hinge section (Figures 2 and 3c [refs 32 ,33, and 34a-c] and col. 2, line 49 to col. 3, line 39 and col 4, lines 45-46).

Rydbeck and Nagai are combinable because they share a common endeavor, namely, radiotelephones that incorporate antennas that move away from the user's head. At the time of the applicant's invention, it would have been obvious to modify Rydbeck to use hinging mechanism as done by Nagai to permit the fastest and most efficient means of moving the antenna from the first position to the second position.

Regarding claims 3 and 6, depending on the hinging configuration of Rydbeck, as well as the groove configuration, the antenna will tend to be moved towards one or both positions (col. 2, line 49 to col. 3, line 39).

Regarding claim 13, the rotating antenna provided by Nagai produces a plan of rotation that is perpendicular to the front surface of the radiotelephone (Figure 4b).

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Regarding claim 14, helical antennas are known to be configured inside housing as the one illustrated in Rydbeck and they are known to have the flexibility to make this canted position possible. Therefore, it would have been obvious for Rydbeck to utilize helical antenna structures in canted antenna radio telephones because of their physical flexibility and strong availability in the industry.

Regarding claim 15, Rydbeck's preferred embodiment provides for the phone's speaker to be positioned on the phone's front face and mounted adjacent to the top edge [the edge where the antenna is located] (col. 3, lines 35-46).

Regarding claim 16, Rydbeck's preferred embodiment, as is typical with radiotelephones, places the microphone at the bottom of the front face, away from the antenna at the top (Figure 2 and col. 3, lines 35-46).

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Seitz discloses an antenna positioning apparatus capable of substantially vertical orientation.

Nagai (U.S. Patent No. 5,706,332) disclosing an apparatus for unfolding an activating a portable telephone.

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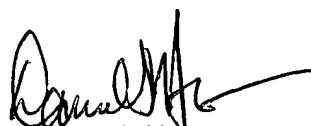
Any inquiry concerning this communication from the examiner should be directed to Alan Gantt at telephone number (703) 305-0077. The Examiner can normally be reached between 8:30 a.m. and 5:00 p.m. EDT. The group FAX number is (703) 305-9508.

Any inquiry of a general nature or relating to the status of the application should be directed to the group receptionist at telephone number (703) 305-3900.

*Alan Gantt*

Alan Gantt

November 18, 1999

  
Daniel S. Hunter  
Primary Examiner